Day 2 Exercises

Section C. Exercises that use decision statement like if – else and the like

1. Write a program that would request for your name and gender (M or F assume capital letter) and print a greeting like this:

   Good Morning Mr. Venkat

   where you entered Venkat for name and M for gender.

2. Write a program that would request for your name, gender and age and would print a greeting like this:

   Good morning Uncle Sam (if Sam, M, 45 is entered)

   (any gentlemen 40 years or more is Uncle any lady 40 years or more is Aunty, if less than forty they become just Mr or Ms. as the case may be.)

3. Write a program that would compute the grade for a mark that the student gets. The program should take an integer number between 0 and 100 and print the following:

   You scored 73 marks which is B grade.

   where 73 is the input and B is calculated by the program. Use the following table for computing the grades:

Marks	Grade
80 to 100	A
60 to 79	B
40 to 59	C
0 to 40	F
< 0	**Error**
> 100	**Error**

4. ABC Taxi Company has the following meter charges based on the kilometres travelled.

   Minimum charge: $2.40 (first 0.5 km no additional charges apply)
   For the next 8.5 kms the rate is 4 cents for every 100 meters
   After that: 5 cents for every 100 meters

   In the above example you should assume that the meter falls every 100 meters. So assume that if the distance travelled (i.e. input) is 12.13 km then it is rounded to 12.20 and the cost would be:

   $ 2.40 (first 0.5 km) +
   $ 85 * 0.04 (next 8.5 km) +
   $ (122 -90) * 0.05 (for distance over 9.0 km)

   = $7.40

Input	Output
0	2.4
0.5	2.4
9	5.8
12.13	7.4

5. Given a three-digit integer as input write a C# program to determine whether the number is an Armstrong number.

   An Armstrong number is one for which the sum of each digit raised to the power of number of digits results in the number itself.

   For a three digit number 153 = $1^3 + 5^3 + 3^3$

   Confine the input to 3 digit examples only i.e., number values 100…999.

Input	Output
100	False
370	True
371	True
372	false